

U.S. Patent Application Serial No. 10/523,034  
Response filed August 5, 2009  
Reply to OA dated April 6, 2009

**AMENDMENTS TO THE CLAIMS:**

Please amend claims 1-4, 6-9, 11 and 13, as follows. This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (Currently amended): A particulate flower thinning agent which comprises a preparation of a mixture of an inorganic compound of poor water solubility with an additive,

the inorganic compound being at least one kind selected from silica, calcium carbonate, zeolite, magnesium phosphate, and magnesium carbonate, and

the additive being at least one kind selected from condensed phosphoric acid and a salt thereof, lecithin, sterol, amino acid, and sucrose fatty acid ester,

wherein the particulate flower thinning agent satisfies the following relationships of (a), (b) and (c):

(a)  $1.2 \leq P \leq 30$

(b)  $3 \leq Q \leq 800$

(c)  $0.5 \leq Q/P \leq 1000$

P: average particle diameter ( $\mu\text{m}$ ) measured by SALD-2000A laser type particle size distribution meter

Q: BET specific surface area ( $\text{m}^2/\text{g}$ ) measured according to the nitrogen adsorption method.

Claim 2 (Currently amended): The particulate flower thinning agent of claim 1,  
wherein the particulate flower thinning agent satisfies the following relationships (d), (e) and (f) :

(d)  $1.2 \leq P \leq 10$

(e)  $7 \leq Q \leq 300$

(f)  $0.5 \leq Q/P \leq 300$ .

Claim 3 (Currently amended) The particulate flower thinning agent of claim 1,  
wherein the particulate flower thinning agent satisfies the following relationships (g), (h) and (i) :

(g)  $1.2 \leq P \leq 5$

(h)  $10 \leq Q \leq 200$

(i)  $1 \leq Q/P \leq 150$ .

Claim 4 (Currently amended): A particulate flower thinning agent according to any one of claims  
1 to 3,

wherein the particulate flower thinning agent satisfies the following relationships of (j), (k) and (l):

(j)  $0.5 \leq D_{ys} \leq 10$

(k)  $0.002 \leq D_{xs} \leq 10$

(l)  $0.5 \leq D_{ys}/D_{xs} \leq 300$

U.S. Patent Application Serial No. 10/523,034

Response filed August 5, 2009

Reply to OA dated April 6, 2009

Dys: point (ml/g) when mercury penetration increment (Log Differential Intrusion) becomes maximum in a mercury penetration method

Dxs: average pore diameter ( $\mu\text{m}$ ) of interparticle pores and intraparticle pores of the particulate flower thinning agent as measured by a mercury penetration method

Dys/Dxs: amount of average pore diameter of interparticle pores and intraparticle pores.

Claim 5 (Canceled).

Claim 6 (Currently amended): A particulate flower thinning agent according to any one of claims 1 to 3, wherein the inorganic compound of poor water solubility is at least one kind selected from silicate mineral, zeolite, and magnesium phosphate.

Claim 7 (Currently amended): A particulate flower thinning agent which comprises a mixture comprising calcium phosphate and an additive,

the additive being at least one kind selected from condensed phosphoric acid and a salt thereof, lecithin, sterol, amino acid, and sucrose fatty acid ester,

wherein the particulate flower thinning agent satisfies the following relationships of (a), (e), (m) and (n):

(a)  $1.2 \leq P \leq 30$

(e)  $3 \leq Q \leq 300$

(m)  $0.01 \leq R \leq 30$

(n)  $0.5 \leq S \leq 300$

P: average particle diameter ( $\mu\text{m}$ ) measured by SALD-2000A laser type particle size distribution meter

Q: BET specific surface area ( $\text{m}^2/\text{g}$ ) measured according to the nitrogen adsorption method

R: average particle diameter ( $\mu\text{m}$ ) of particles measured by electron micrograph

S= BET specific surface area Q ( $\text{m}^2/\text{g}$ ) measured according to the nitrogen adsorption method/  
specific surface area Q1 ( $\text{m}^2/\text{g}$ ) calculated from average particle diameter R of particles measured by  
electron micrograph.

Claim 8 (Currently amended): A particulate flower thinning agent which comprises a mixture comprising calcium phosphate and an additive,

the additive being at least one kind selected from condensed phosphoric acid and a salt thereof, lecithin, sterol, amino acid, and sucrose fatty acid ester,

wherein the particulate flower thinning agent satisfies the following relationships of (a), (e), (o) and (t):

U.S. Patent Application Serial No. **10/523,034**

Response filed August 5, 2009

Reply to OA dated April 6, 2009

(a)  $1.2 \leq P \leq 30$

(e)  $3 \leq Q \leq 300$

(o)  $0.01 \leq R \leq 10$

(t)  $0.5 \leq S \leq 100$

P: average particle diameter ( $\mu\text{m}$ ) measured by SALD-2000A laser type particle size distribution meter

Q: BET specific surface area ( $\text{m}^2/\text{g}$ ) measured according to the nitrogen adsorption method

R: average particle diameter ( $\mu\text{m}$ ) of particles measured by electron micrograph

S= BET specific surface area Q ( $\text{m}^2/\text{g}$ ) measured according to the nitrogen adsorption method/  
specific surface area Q1 ( $\text{m}^2/\text{g}$ ) calculated from average particle diameter R of particles measured by  
electron micrograph.

Claim 9 (Currently amended): A particulate flower thinning agent which comprises a mixture comprising calcium phosphate and an additive,

the additive being at least one kind selected from condensed phosphoric acid and a salt thereof, lecithin, sterol, amino acid, and sucrose fatty acid ester,

wherein the particulate flower thinning agent satisfies the following relationships of (a), (e), (u) and (v):

U.S. Patent Application Serial No. **10/523,034**

Response filed August 5, 2009

Reply to OA dated April 6, 2009

(a)  $1.2 \leq P \leq 30$

(e)  $3 \leq Q \leq 300$

(u)  $0.01 \leq R \leq 5$

(v)  $0.5 < S \leq 10$

P: average particle diameter ( $\mu\text{m}$ ) measured by SALD-2000A laser type particle size distribution meter

Q: BET specific surface area ( $\text{m}^2/\text{g}$ ) measured according to the nitrogen adsorption method

R: average particle diameter ( $\mu\text{m}$ ) of particles measured by electron micrograph

S= BET specific surface area Q ( $\text{m}^2/\text{g}$ ) measured according to the nitrogen adsorption method/  
specific surface area Q1 ( $\text{m}^2/\text{g}$ ) calculated from average particle diameter R of particles measured by  
electron micrograph.

Claim 10 (Canceled).

Claim 11 (Currently amended): A particulate flower thinning agent according to any one of claims 1-3 and 7-9, wherein an amount of the additive is 0.005 to 200 parts by weight per 100 parts by weight of the inorganic compound of poor water solubility.

U.S. Patent Application Serial No. **10/523,034**

Response filed August 5, 2009

Reply to OA dated April 6, 2009

Claim 12 (Canceled).

Claim 13 (Currently amended): A particulate flower thinning agent according to claim 4, wherein the inorganic compound of poor water solubility is at least one kind selected from silicate mineral, zeolite, and magnesium phosphate.